Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra
MD (Pathology)
CEO & Consultant Pathologist

Name	: Mrs.MEENAKSHI SHARMA	Centre Details	:ONCQUEST PANCHKULA
Age	: 37 Yrs Sex: Female	Accession.ID	:PAN2406260051
Collection Date	: 27/Jun/2024 04:23PM	Referred By	:KOS DIAGNOSTIC LAB
Received Date	: 27/Jun/2024 09:02AM	Report Date	:06/Jul/2024 03:53PM
Registration Date	: 26/Jun/2024	Ref. No./TRF No.	: /

DEPARTMENT OF MOLECULAR DIAGNOSTICS-III

#NIPT: All Chromosome Test

Indication : -

NIPT screens a maternal blood sample for chromosomal aneulpoidy in fetal DNA using the following methodology:

1. Extraction of fetal cell-free DNA from the maternal blood sample
2. High throughput sequencing of the extracted fetal cell-free DNA
3. Calculation of molecular mass of fetal DNA in all chromosomes

Based on the scope, NIPT can screen the following conditions:
(a) Whole Genome - 23 pairs of human chromosomes
(b) Common Chromosomal abnormality:

- Trisomy 13 (Patau's Syndrome)
- Trisomy 18 (Edwards' Syndrome)
- Trisomy 21 (Down's Syndrome)

NIPT is capable of genome-wide aneuploidy detection of the whole foetal genome (23 pairs of chromosomes). Test results with the interpretation of risk for Trisomy 13 Trisomy 18, Trisomy 21 and sex chromosome aneuploidies will be provided. This test confers an accuracy of up to **99%** on the detection of foetal chromosomal aneuploidy.

Pregnancy Type	Blood ID	Patient ID
Singleton	NA	NA

Test Results Summary

Autosomal Aneuploidies		Risk	Test Results	Aneuploidy Risk
Chromosome 13			Low risk group	<1/10000
Chromosome 18			Low risk group	<1/10000
Chromosome 21			Low risk group	<1/10000
Other Chromosome			Low risk group	

Test Results for Sex Chromosome Aneuploidies

ISO 9001 : 2008 CERTIFIED LAB

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS™
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra
MD (Pathology)
CEO & Consultant Pathologist

Name	: Mrs.MEENAKSHI SHARMA	Centre Details	:ONCQUEST PANCHKULA
Age	: 37 Yrs Sex: Female	Accession.ID	:PAN2406260051
Collection Date	: 27/Jun/2024 04:23PM	Referred By	:KOS DIAGNOSTIC LAB
Received Date	: 27/Jun/2024 09:02AM	Report Date	:06/Jul/2024 03:53PM
Registration Date	: 26/Jun/2024	Ref. No./TRF No.	: /

DEPARTMENT OF MOLECULAR DIAGNOSTICS-III

Sex Chromosome Aneuploidies	Risk	Test Results	Aneuploidy Risk
XO		Low risk group	<1/10000
XXY		Low risk group	<1/10000
XXX		Low risk group	<1/10000
XYY		Low risk group	<1/10000

Risk description: Low risk group; Borderline group; High risk group

Test Results for Other Chromosomal Aneuploidies

Other Chromosomal Aneuploidies		Risk	Test Results
Chromosome 1			Low risk group
Chromosome 2			Low risk group
Chromosome 3			Low risk group
Chromosome 4			Low risk group
Chromosome 5			Low risk group
Chromosome 6			Low risk group
Chromosome 7			Low risk group
Chromosome 8			Low risk group
Chromosome 9			Low risk group
Chromosome 10			Low risk group
Chromosome 11			Low risk group
Chromosome 12			Low risk group
Chromosome 14			Low risk group
Chromosome 15			Low risk group
Chromosome 16			Low risk group
Chromosome 17			Low risk group
Chromosome 19			Low risk group
Chromosome 20			Low risk group
Chromosome 22			Low risk group

Risk description: Low risk group; Borderline group; High risk group

ISO 9001 : 2008 CERTIFIED LAB

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS™
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra
MD (Pathology)
CEO & Consultant Pathologist

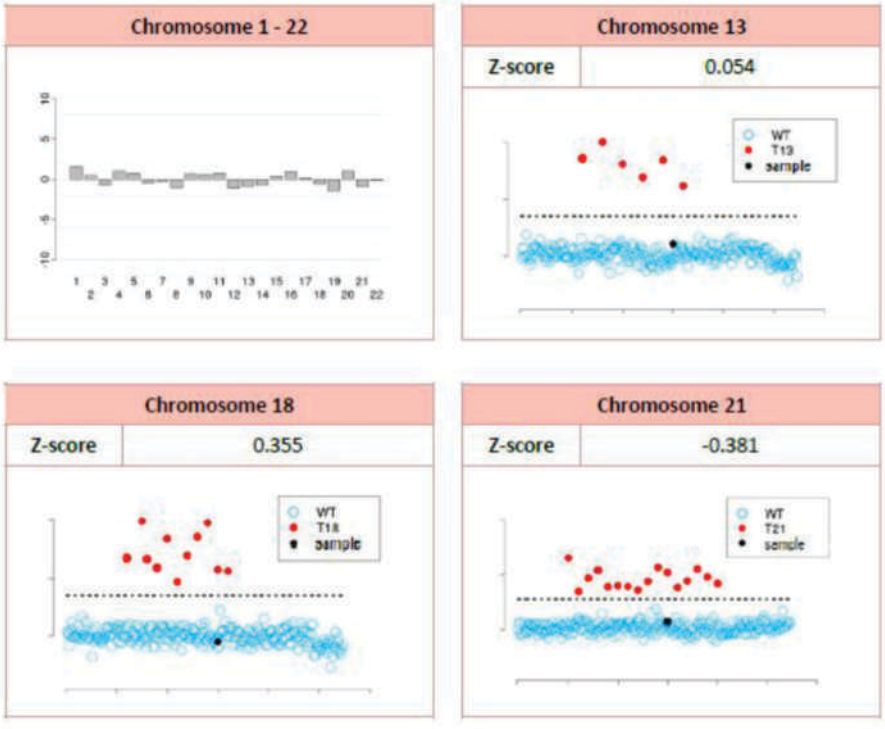
Name	: Mrs.MEENAKSHI SHARMA	Centre Details	:ONCQUEST PANCHKULA
Age	: 37 Yrs Sex: Female	Accession.ID	:PAN2406260051
Collection Date	: 27/Jun/2024 04:23PM	Referred By	:KOS DIAGNOSTIC LAB
Received Date	: 27/Jun/2024 09:02AM	Report Date	:06/Jul/2024 03:53PM
Registration Date	: 26/Jun/2024	Ref. No./TRF No.	: /

DEPARTMENT OF MOLECULAR DIAGNOSTICS-III

Sample Information	
Fetal DNA fraction	12.39 %

Note: In rare cases when fetal DNA fraction level is low, new blood sample will be requested for retesting.

Test Results



- These images are only for representation purposes.

ISO 9001 : 2008 CERTIFIED LAB

KOS Diagnostic Lab
(A Unit of KOS Healthcare)

KOS™
EXCELLENCE IN HEALTHCARE & DIAGNOSTICS

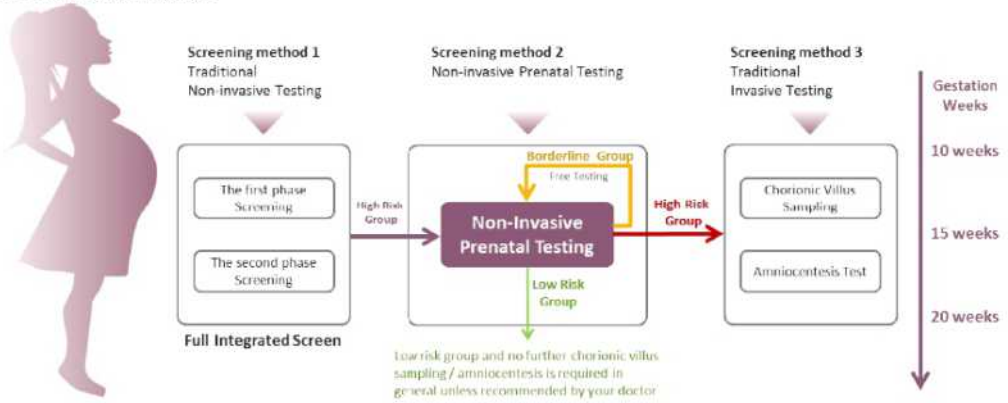
Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra
MD (Pathology)
CEO & Consultant Pathologist

Name	: Mrs.MEENAKSHI SHARMA	Centre Details	:ONCQUEST PANCHKULA
Age	: 37 Yrs Sex: Female	Accession.ID	:PAN2406260051
Collection Date	: 27/Jun/2024 04:23PM	Referred By	:KOS DIAGNOSTIC LAB
Received Date	: 27/Jun/2024 09:02AM	Report Date	:06/Jul/2024 03:53PM
Registration Date	: 26/Jun/2024	Ref. No./TRF No.	: /

DEPARTMENT OF MOLECULAR DIAGNOSTICS-III

Prenatal Examination



About the Test

NIPT analyzes circulating fetal cell-free DNA extracted from a maternal blood sample, and is offered to pregnant women with a pre-test risk of aneuploidy in chromosomes such as 13, 18, 21, X or Y. The chance that a fetus is affected with chromosomal aneuploidy can be estimated using bioinformatics analyses, by which the accuracy rate and sensitivity are over 99%. The accuracy and quality of the test may be affected by low fetal fraction, high data noise due to improper blood sample collection, handling, storage, or transportation.

Limitations of the test

Non-invasive prenatal testing should only be considered a screening test. The screening test of fetal cell-free DNA cannot compare with the prenatal diagnosis with Amniocentesis or Chorionic Villus Sampling (CVS). Pregnant women with a positive NIPT screening result should be given an invasive prenatal diagnosis and referred further for genetic counselling to confirm conditions. On the other hand, a negative test result does not ensure an unaffected pregnancy. Even though NIPT provides reliable results, it does not apply to all cases of chromosomal abnormalities, for example, cases due to placental, maternal, or fetal mosaicism, or other causes (e.g. micro-deletions, chromosome re-arrangements, translocation, inversions, unbalanced translocation, uni parental disomy, etc.). NIPT is also not applicable for cases with a diagnosed multiple gestation, or with gestational age that is less than 10 weeks. In rare cases when a borderline screening result is reported, retesting is required to confirm conditions.

Test Method

NIPT applies a non-invasive and low-risk procedure to collect fetal DNA samples. Circulating fetal cell-free DNA is purified from the plasma component of 10mL anti-coagulated maternal whole blood. It is then converted into a
genomic DNA library for Next Generation Sequencing to determine Trisomy 21, 18 and 13 and other chromosomal abnormalities.

References

1. ObstetGynecol 2012; 119:890-901.
2. BMJ 2011; 342:c7401.
3. PrenatDiagn 2012; 32:c7401.

Dr. Vinay Chopra
MD (Pathology & Microbiology)
Chairman & Consultant Pathologist

Dr. Yugam Chopra
MD (Pathology)
CEO & Consultant Pathologist

Name	: Mrs.MEENAKSHI SHARMA	Centre Details	:ONCQUEST PANCHKULA
Age	: 37 Yrs Sex: Female	Accession.ID	:PAN2406260051
Collection Date	: 27/Jun/2024 04:23PM	Referred By	:KOS DIAGNOSTIC LAB
Received Date	: 27/Jun/2024 09:02AM	Report Date	:06/Jul/2024 03:53PM
Registration Date	: 26/Jun/2024	Ref. No./TRF No.	: /

DEPARTMENT OF MOLECULAR DIAGNOSTICS-III

4. ACOG/SMFM Joint Committee Opinion No. 545, Dec 2012.

Note: This test is developed, validated & performed at the third party lab.'
Note: The sex of fetus is not revealed due to PNDT Act.

***** End Of Report *****